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Developmental Engineering

**USAF AIRCRAFT AIRWORTHINESS
CERTIFICATION**

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Aircraft owned and operated by the Air Force fall under the Federal Aviation Regulation definition of public aircraft and thus the Air Force is the responsible agent for certification of airworthiness. This policy establishes the requirement for airworthiness certification of USAF aircraft by the responsible single manager and establishes the Airworthiness Certification Criteria Control Board (AC³B). This policy applies to all US Air Force aircraft, including those of the Air National Guard (ANG) and US Air Force Reserve Command (AFRC).

1. General . Airworthiness certification is required for all USAF aircraft entering or currently in inventory. Airworthiness certification shall signify compliance to the *Airworthiness Certification Criteria* established by the AC³B. The single manager (SM) for the aircraft is the airworthiness certification official. Related policy is contained in AFD 62-4, Standards of Airworthiness for Passenger Carrying Commercial Derivative Transport Aircraft, and AFD 62-5, Standards Of Airworthiness For Commercial Derivative Hybrid Aircraft.

2. Responsibilities and Authorities:

- 2.1. SAF/AQ will ensure acquisition directives and policies require the airworthiness certification.
- 2.2. USAF/XO will ensure airworthiness certification requirements are included in joint and Air Force program requirement documents.
- 2.3. USAF/IL will:
 - 2.3.1. Ensure maintenance management directives and policies (AFI 21-101, Maintenance Management of Aircraft; AFI 21-102, Depot Maintenance Management, and AFI 21-107, Maintaining Commercial Derivative Aircraft) include procedures that preserve aircraft airworthiness, regardless of maintenance location (field or public/private depots).

2.3.2. Ensure supply directives and policies (AFMAN 23-110, USAF Supply Manual) include processes and practices that maintain aircraft airworthiness.

2.4. HQ USAF/SE (AFSC) will collect flight safety information related to aircraft airworthiness and make it available to the AC³B.

2.5. Major Commands (MAJCOMs)/Air National Guard/US Air Force Reserve will:

2.5.1. Prohibit alterations or modifications to aircraft without the approval of the airworthiness-certifying official or, in the case of T-2 modifications to AFMC Test Center, Test Organization, or Laboratory assigned and possessed aircraft, without the approval of the delegated safety of flight determining official.

2.6. Airworthiness Certification Criteria Control Board (AC³B) will:

2.6.1. Establish and maintain the Airworthiness Certification Criteria used by aircraft single managers to certify aircraft airworthiness. The Airworthiness Certification Criteria must allow aircraft single managers with aircraft already fielded as of the date of first issuance of this policy sufficient flexibility such that certification can be achieved in a cost effective manner consistent with safety.

2.6.2. Have a membership comprised of representation from SAF/AQ, HQ USAF/XOO/IL/SE, HQ AFFSA, HQ AFMC, ASC, ESC, OC-ALC, OO-ALC, WR-ALC, ACC, AMC, AETC, AFSOC, ANG, and AFRC. The board will document and maintain formal membership.

2.6.3. Be chaired by the Commander of the Aeronautical Systems Center, or a designated representative, who will be the final approval authority for the Airworthiness Certification Criteria.

2.6.4. Meet at times and locations established by the chairman.

2.6.5. Recommend changes in the airworthiness certification criteria to the AC³B chairman for approval.

2.6.6. Disseminate flight safety related information as needed to increase awareness of flight safety technical issues and flight safety concerns consistent with privilege guidelines as identified in AFI 91-204, Safety Investigations and Reports.

2.7. Aeronautical Systems Center (ASC) will:

2.7.1. Establish guidelines for determining airworthiness of modified aircraft and provide support for their application as required.

2.7.2. Publish, under signature of the AC³B chair, and distribute the Airworthiness certification criteria and any minutes of AC³B meetings.

2.7.3. Appoint a representative to the AC³B. The representative must possess suitable technical competence to render technical judgements regarding the Airworthiness Certification Criteria or any change under consideration by the board.

2.7.4. Chair the AC³B.

2.7.5. Report airworthiness certification compliance metric to the AC³B.

2.7.6. Act as the focal point for collection of flight safety related information for dissemination by the AC³B. Works with Air Force Safety Center regarding flight safety issues affecting aircraft airworthiness.

2.8. Aircraft Single Managers will:

2.8.1. Certify aircraft airworthiness, prior to the start of dedicated operational test and evaluation, and document the method of compliance with the Airworthiness Certification Criteria. Certification may be accomplished through Federal Aviation Administration certificates when applicable.

2.8.2. Certify aircraft airworthiness upon inclusion of temporary (with the exception of T-2 modifications as stated in 2.8.4. below) or permanent modifications as defined in AFI 21-101 and document the method of compliance with the Airworthiness Certification Criteria.

2.8.3. Include instructions for continued airworthiness in aircraft technical orders.

2.8.4. May delegate safety of flight determination authority to AFMC Test Centers, Test Organizations, and Laboratories for T-2 modifications on test center, test organization, or laboratory assigned and possessed aircraft.

2.8.5. Maintain and manage data and aircraft configuration in support of airworthiness certification.

2.8.6. Recommend changes to the Airworthiness Certification Criteria to the AC³B for consideration and provide feedback to the AC³B on lessons learned in application of the criteria.

2.8.7. Provide written notification to ASC/EN confirming aircraft airworthiness certification in accordance with established criteria to enable reporting of policy compliance metrics.

2.8.8. Prior to first flight, make and document a positive determination of safety of flight in accordance with ASC guidelines.

2.8.9. Obtain and document recommendations from the original equipment manufacturer (OEM) and/or prime contractor when making certification and safety of flight determinations.

2.8.10. Include verification of appropriate aircraft airworthiness certification criteria as objectives in Test and Evaluation Master Plans.

2.9. AFMC Test Centers, Test Organizations, and Laboratory will:

2.9.1. Comply with ASC guidelines in determining safety of flight of a temporarily modified aircraft.

2.9.2. Make and document a positive determination of safety of flight, if delegated by the SM, prior to the first flight of temporarily modified aircraft. Fully document any configuration changes and inform the SM.

2.9.3. Prohibit alterations or modifications to aircraft without the approval of the airworthiness certification official or the delegated safety of flight determining authority.

2.10. SAF/AQ, HQ USAF/XOO/IL/SE, HQ AFFSA, HQ AFMC, ESC, OC-ALC, OO-ALC, WR-ALC, ACC, AMC, AETC, AFSOC, ANG, and AFRC will appoint representatives to the AC³B.

These representatives must possess suitable technical competence to render technical judgements regarding the airworthiness certification criteria or any change under consideration by the board.

F. WHITTEN PETERS
Secretary of the Air Force

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 21-101, *Maintenance Management of Aircraft*

AFI 21-107, *Maintaining Commercial Derivative Aircraft*

AFPD 62-4, *Standards of Airworthiness for Passenger Carrying Commercial Derivative Transport Aircraft*

AFPD 62-5, *Standards of Airworthiness for Commercial Derivative Hybrid Aircraft*

AFPD 63-10, *Aircraft Structural Integrity*

AFI 63-1001, *Aircraft Structural Integrity Program*

AFI 63-104, *The SEEK EAGLE Program*

AFPD 63-12, *Assurance of Operational Safety, Suitability, and Effectiveness*

AFI 63-1201, *Assurance of Operational Safety, Suitability, and Effectiveness*

AFPD 91-1, *Nuclear Weapons and Systems Surety*

AFI 91-204, *Safety Investigations and Reports*